## BEFORE THE STATE WATER RESOURCES CONTROL BOARD In the Matter of the State Water Resources Control Board (State Water Board) Hearing Date: July 23 - 25, 2008 Hearing to Determine whether to Adopt a Draft Cease & Desist Order against California American Water Regarding its Carmel River in Monterey County Diversion of Water from the Carmel River in Monterey County under Order WR 95-10) **EXHIBIT MPWMD-SP2** MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

## Monterey Peninsula Water Management District Conservation Activities 1980 - 2007

District-wide allocation plan was developed. This led to Sand City & Monterey County adopting internal allocation plans.

District implemented program to obtain water permits for new uses as a method to avoid over-commitment of supplies.

1982 Distributed conservation kits to public.

Ad Hoc committee formed to study feasibility of reclamation, reuse, and conservation.

Board approved transfer of funds to develop a water conservation plan. District began participation in joint county-wide conservation plan.

Aquaculture was reviewed as a potential method for augmenting allocations and for reusing waste water. San Diego had a pilot project at that time.

The District supported efforts to reclaim CAWD waste water for use on golf courses and open space.

The District assembled a library of conservation ideas and techniques. Spoke to numerous groups about water conservation, distributed drought-tolerant plant lists to local gardeners.

Provided conservation kits available free of charge to the general public.

District and State co-sponsored a seminar on water conservation at the Naval Postgraduate School. Approximately 60 people attended the seminar.

District began looking at creating a leak detection program and at mandatory retrofit laws.

1984 Water savings kits were available at the District free of charge.

Cal-Am included conservation messages in their bills.

Recommendation to Board to establish staff position of Demand Management Coordinator for conservation outreach, public relations and demand management.

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Demand Management Coordinator and summer intern began work on a conservation program and on the District's part of the Water Conservation Plan.

Board began review of Ordinance No. 21 which established the fixture unit method and commercial water demand by category processing of permits.

1985 Retrofit program implemented to promote ultra-low flush toilet installation. Promotion included advertising and exhibits.

Library display on conservation was provided to local libraries on a rotating basis.

District formed a "speaker's bureau" to provide speakers on conservation and other District activities. Notice was sent to civic and neighborhood groups.

Routine conservation hand-outs were provided at the District offices.

Distributed District's drought-tolerant plant list to local nurseries and notified press.

District implemented water conservation plan. Board formed TAC to prepare plans for retrofit ordinance.

TAC began development of mandatory retrofit ordinance.

District participated in Monterey County Science Fair. Board Chair awarded certificates of merit to the top water-related science projects. Best project received \$25.

District installed two ultra-low flush (ULF) toilets in the offices for demonstration. Another three ULF toilets were obtained for display in June.

Staff met with golf course owners and maintenance personnel to discuss conservation. District applied for state grant to assist with program.

Board approved policy to give "credit" for ultra-low flush toilets on permit applications. Instead of charging the customary 4 fixture units per toilet, ultra-low flush fixtures were charged 1.7 fixture units, saving an applicant between \$245 and \$300.

Drought tolerant garden awards program concluded. Program began in February and had 40 nominations.

Resolution 85-15 approved. Resolution requested the California Coastal Commission to direct Pebble Beach Community Services District to perform a scope of work for the reclamation project.

District booth at the Monterey County Fair. Booth included visual display about the District allocations and conservation activities, including the landscape contest. The display also featured drought-tolerant plans, free conservation kits, and a taped slide show about the District.

In-school education program co-sponsored by District and Cal-Am. Experts in the field gave presentations and hands-on workshops.

Public information program began. Program included public service announcements and advertisements. The District sponsored a Xeriscape landscape workshop. The District also wrote an article for state-wide publication about how the District's conservation program.

Presentation to MPC students about the District's water supply situation and the need to conserve water.

Developed audit/leak detection program with the State Department of Water Resources. The District held a workshop to share the information with Cal-Am and other local agencies and the public.

1987: Conservation kit distribution program began. Distributed water saving kits over two years to 42,000 households. During 1987, the installation rate was 85%.

With the City of Monterey's cooperation, the District mailed conservation literature to all Monterey residents.

Staff participated in radio and television interviews.

Held a public forum in the spring on the proposed conservation measures. Invitations were sent to 2,500 people.

Joint-sponsored a water seminar with Hartnell College.

Ordinance 29 implemented a conservation fee to offset programs of the District. Ordinance 30 was implemented which required retrofit of toilets and showerheads upon change of ownership or use, the addition of 25% or more of the existing floor area, or the addition of a bathroom. An exemption from the toilet retrofit requirement was granted for toilets that used less than 3.5 gallons and had a water savings device installed to reduce the flush by 1.0 gallon.

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Ordinance 30 also required certification of compliance before every transfer of title and implemented mandatory water-saving retrofits in existing commercial uses. The District hired a conservation representative to enforce the regulation and inspect retrofitted properties.

Co-sponsored school programs, tours of water and wastewater plants during Water Awareness Week.

Co-sponsored Xeriscape conference with Soquel Creek Water District.

Began active enforcement of Ordinance 30. Used temporary employees to inspect over 400 commercial properties for compliance with business conservation requirements.

Began rigorous inspection program for transfers of ownership and new construction.

Kit program was completed. Ninety-four percent installation was achieved. Projected water savings of 10% are expected for the life of the installation.

Media campaign. Radio and television advertisements, as well as newspaper articles and a week-long television special on conservation tips were included in the campaign.

District-sponsored seminar "Dealing With Drought In Your Garden" was held. Capacity crowd attended the seminar held at Asilomar.

Ordinance 35 restricted water waste and unnecessary use of water during the drought. The ordinance also established four response levels to ensure consumptive use did not exceed the anticipated water supplies. This ordinance initiated the four phases of water rationing and is the most comprehensive water conservation ordinance imposed by the District.

1988 Continued previous media and outreach efforts.

Water Rationing underway

1990 Provided conservation kits free of charge to District residents.

Continued active enforcement of Ordinance 30.

Provided connection charge credits for extraordinary water-saving appliances when installed as part of a water permit application.

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"Save Your Share" water conservation campaign began. Included multi-media coverage, participation at fairs, conferences and seminars. As part of this water conservation publicity effort, the District published brochures, held conservation workshops, gave presentations at schools and other local service agencies, provided table tents and mirror decals to businesses, and provided useful information to local gardeners. Staff was interviewed on National Public Radio and by the Los Angeles Times about the District's conservation program.

Actively enforced the water waste rules.

District-sponsored "Dealing With Drought" seminar at the Monterey Conference Center.

Held teacher training workshops on AIMS (Activities Involving Math and Science) as part of the Water Awareness Committee of Monterey County.

District's rationing program was at full-force.

Continued provided free water conserving showerheads, faucet aerators, toilet dams, and dye tablets.

Participated in county-wide effort to prepare an emergency drought response plan.

Ordinance 43 amended Ordinance 30, eliminating the exemption for 3.5 gallons-perflush toilets. All toilets had to be replaced with ones designed to use no more than 1.6 gallons-per-flush upon change of ownership, use, expansion of 25% or more of the existing square-footage or the addition of a bathroom.

Ordinance 47 placed a temporary limit on the amount of water that could be allocated to water use expansions.

Allocation EIR and Option V ratified by District Board.

Ordinance 52 adopted as an urgency ordinance.

District entered moratorium on expansions in water use.

Rationing ended.

Continued participation in Water Awareness Committee. This group provides ongoing educational benefits to school-children and the public, sponsors displays at fairs and other public gatherings, in addition to providing water-related information

and books to area libraries.

Developed proposal for toilet recycling program. This program was not supported, however, the landfill in Marina recycles toilets after all non-ceramic material are removed. Toilets are crushed and used for road aggregate.

Developed a television advertisement thanking the public for their participation in the rationing program.

Ordinance 59 amended and republished Ordinance No. 52.

District co-sponsored "Landscapes for the Future" seminar which featured speakers from Sunset Magazine. Seminar was co-sponsored by the California Landscape Contractors Association.

Staff completed more than 360 inspections of large commercial properties to verify compliance with business conservation laws.

Participation in the Water Awareness Committee resulted in a public education program which reached 5,000 children in primary schools.

Created, printed and donated plant tags marked "Water Conserving" to area nurseries. Provided nurseries with information displays stocked with water efficient gardening information and plant lists.

Staff gave a presentation at the California State Department of Water Resources conference held in Monterey on the State's new water conserving landscape requirements for city planners and landscape professionals.

Encouraged installation of water-saving appliances. Completed comprehensive analysis of the efficiency of these fixtures and provided connection charge credits to applicants agreeing to install the appliance as part of a permit application.

Consulted with local landscaping professionals about the state's water efficient landscape requirements.

Provided on-site water conservation training sessions to commercial water users.

Sponsored ten live theater performances by the Small Change Theater in local elementary schools.

Conducted water conservation conference on how rationing might affect lifestyles.

Ordinance 61 amended the restrictions for water waste and repealed the water supply emergency. The provisions of this ordinance continue to be enforced.

1993 Irrigation demonstration project completed at La Mirada Adobe (Monterey Peninsula Museum of Art). The project consists of six cisterns capable of storing 9,000 gallons of water for use in the gardens. The gardens also demonstrate drip irrigation and mulching and brochures are available which explain the equipment in use.

Provided conservation information and plant lists to the public via the information stands at the local nurseries.

The Water Awareness Committee sponsored various educational activities at the local public schools. The Committee co-sponsored a Garden Faire at MPC, which featured examples of water efficient practices and plants to educate the public on water-saving landscaping techniques.

Sent information to local plumbers and plumbing supply stores about the new state law which mandates the sale and installation of ultra-low flush toilets.

Donated water conservation books and videos to local libraries. Also contributed water-saving hand-outs and posters as part of the Water Awareness Month effort.

Participated in the Garden Faire held at MPC.

Participated in a local cistern tour.

1995

Provided and set up conservation displays at local libraries.

Presented information about District conservation and construction requirements and programs at an the Office of Statewide Health Planning and Development staff meeting.

Participated in Earth Day by staffing water information booth.

Contributed articles to the Water Awareness Month insert that was published in the Monterey County Herald.

Adopted Ordinance No. 75. This ordinance allows a jurisdiction to obtain water credits in its allocation for water saved through permanent retrofits of public facilities. This ordinance will encourage permanent conservation savings to occur on properties not ordinarily subject to the District's conservation laws.

Water conservation was a feature of the District booth at the Earth Day festival.

Conservation messages were featured in newspaper articles, television U:\demand\Conservation\ConservationActivities1980-Present\_March08.doc

announcements, a noon news television interview, a radio jingle contest, and library displays as part of the Water Awareness Committee.

A Water Efficiency Workshop for industrial and agricultural water users was cosponsored by the Water Awareness Committee. Speakers from the Department of Water Resources and Monterey County growers presented benefits and practical information on conservation.

Adopted Ordinance No.85. This ordinance established a Toilet Rebate Program.

District staff planned and developed a drought tolerant demonstration garden to replace the lawns at the District offices. The garden was planned to provide the public with an example of water efficient landscaping and irrigation techniques.

1997 Provided a water information display at the annual Monterey Bay Marine Sanctuary Day Fair.

Continued individual water waste education took place as necessary to remind water users not to wash sidewalks, leave hoses running or ignore leaks.

Continue to provide literature displays to local nurseries and regularly stocked the displays with information relating to efficient irrigation methods and drought-tolerant and native plants.

Continued to provide public education to encourage Peninsula residents and businesses to continue water conservation practices learned during the drought.

Adopted Ordinance No. 90. This ordinance continued the program allowing the reinvestment of toilet retrofit water savings on single-family residential properties for 90-days following the expiration of Ordinance No. 74. This ordinance sunset in September 1998.

Adopted Ordinance No. 91. This ordinance continued the program allowing the reinvestment of water saved through toilet retrofits and other permanent water savings methods at publicly owned and operated facilities.

Ordinance No. 90 and No. 91 were challenged for compliance with CEQA and nullified by the Monterey Superior Court in December 1998.

Adopted Ordinance No. 92. This ordinance established the Expanded Water Conservation and Standby Water Rationing Plan.

Continued an intensive inspection program to ensure compliance with the conservation regulation.

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2000

Performed inspections of new homes and buildings included verification of conservation measures, such as drip irrigation and "instant-access" hot water (systems that make hot water available within six seconds), as well as installation of ultra low-flow fixtures throughout the property.

Continued offering incentives for property owners that agree to install state-of-the-art water appliances as a condition of a water permit. Credit, in the form of water fixture units, remained available for installing ultra-water efficient dishwashers and washing machines, one-half gallon toilets and "instant-access" hot water systems in remodels and additions.

Expanded contact with the media via press releases encouraging water conservation and by more television coverage of water conservation issues.

Printed materials were made available to explain the need for expanded community water conservation under the State Board Order.

Continued supporting water conservation education as a member and participant in the Water Awareness Committee of Monterey County (WAC). Provided books on water efficient landscaping, drip irrigation, and other water related subjects to libraries in Monterey County and provides numerous opportunities for the public to learn about local water issues.

Adopted Ordinance No. 98. This ordinance allowed a single-family dwelling on a single-family residential site to add a second bathroom without causing a debit to the jurisdiction's allocation.

Adopted Resolution 2001-09. This resolution disallowed water use credits for outdoor water fixtures and multiple utility sinks.

Began requiring deed restrictions to enforce requirements and protect community water usage. Board adopted extensive review process.

2002

Continued to perform inspections of new homes and buildings including verification of conservation measures.

Continued supporting water conservation education through the Water Awareness Committee of Monterey County (WAC).

Continued a comprehensive inspection program to ensure compliance with conservation regulations.

Provided free low-flow showerheads and soil moisture sensors to the public.

Conducted a presentation on District water permitting and water conservation related information to homeowners in the Hidden Hills area.

Water Awareness Committee released the new "My Watahbug Fun Book" in both English and Spanish.

Manned a booth during the Marine Sanctuary Ocean Fair. The District provided free low-flow showerheads, faucets aerators, and conservation information.

2003

Provided extensive notice regarding water availability in the former Water West service area, including giving a television interview, legal notices, advertisements, posting notices and a special section on the District website.

Ordinance No. 110 expanded the toilet rebate program to include rebates for ultralow consumption dishwashers, ultra-low consumption washing machines. Dual-flush ultra-low flush toilets, hot water demand pumping systems and rainwater cisterns.

2004

Adopted Ordinance No. 109. This ordinance revised Rule 23.5 and adopted additional provisions to facilitate the financing and expansion of the CAWD/PBCSD Recycled Water Project.

Installed and tested a WeatherTRACK-ET controller at the District offices, resulting in an immediate reduction of 37.5% of monthly irrigation water use on the test site. Partnered with Cal Am during Stage 3 Conservation Rationing to implement an urgent conservation campaign, notify and audit properties in the highest water use category, and influenced overall water use/Cal Am production to enable staying within the production limits set by the PUC.

Presented local water permitting and conservation information for a real estate course at Monterey Peninsula College.

Coordinated and hosted a ground water seminar with WAC.

Coordinated and hosted MPWMD First Annual Open House.

Installed and tested dual-flush and one gallon toilets at District office.

2005

Gave presentation on water conservation to the Fisherman's Flats Homeowners Association in Monterey. District staff provided free showerheads and moisture sensors to the attendees.

Initiated involvement with the California Urban Water Conservation Council (CUWCC) steering committee. The CUWCC meetings provide a forum for discussion and demonstration of the latest water conservation techniques and technology.

Hosted a presentation by Watermiser. The representative demonstrated the Waterbroom and provided information about an in-line flow restrictor and a toilet leak detector gel for flushometer toilets that Watermiser markets. The Waterbroom uses a combination of air and water pressure to clean decking, patios, tennis courts, exterior walkways, entryways, etc. This device replaces the water-wasting garden hose or power washer approach to cleaning large surface areas.

Participated in the Farmer's Market in downtown Monterey. The District collaborated with the City of Monterey and other local public agencies to provide demonstrations on equipment and to hand out information. Among the items shown was a model ultra-low flush toilet and examples of the waterless urinals and pressure reducing valves.

Participated in the Water Awareness Committee of Monterey County's 1<sup>st</sup> Annual Xeriscape Design Awards at the Monterey County Fair. MPWMD staff judged the garden displays in the horticultural center for promotion of the Water Awareness Committee's *Retire Your Turf* campaign.

Coordinated and hosted the Second Annual Open House.

Joined the California Urban Water Conservation Council as a Group 3 signatory to the Memorandum of Understanding Regarding Water Conservation in California.

Represented the District at the California Urban Water Conservation Council (CUWCC) steering committee; a forum for discussion and demonstration of the latest water conservation techniques and technology.

District staff attended seminars on "Smart Technologies for Irrigation Management." "Smart technology" refers to the new irrigation controller equipment that uses local weather information to automatically adjust irrigation schedules, resulting in significant savings of both water and money. The subject matter covered soil-plantwater relationships, uniformity and irrigation efficiency, ET calculations and weather stations, smart controllers, environmental sensors and watering windows and scheduling. The information presented helped District staff with reviewing landscaping plans and water budgets.

Actively participated in the Bay Area Water Conservation Coordinators team; a resource for conservation efforts, programs, studies and experiences with various water use efficiency technologies and measures. This contact provides an important networking opportunity with industry professional helping the District continually expand its water conservation programs.

Coordinated and hosted the Third Annual Open House.

Actively supported WAC.

Initiated and led the regional collaboration on the WaterWise Landscaping for Monterey County water conservation software effort. Organized, budgeted, and coordinated all efforts for the highly successful Water Wise Landscape Symposium and Vendor Expo held in Carmel Valley.

Assisted in coordination of an in-school education program featuring ZunZun and sponsored by WAC. ZunZun is a performing arts group that celebrates the environment through music. The show familiarizes young audiences with the concept of watershed and the importance of watershed in their lives. The show covers such topics as conservation, water pollution, habitat and storm drains.

Participated in the Water Awareness Committee of Monterey County's 2<sup>nd</sup> Annual Water-Wise Landscape Design Competition at the Monterey County Fair. Staff judged the garden displays in the horticultural center for promotion of the Water Awareness Committee's *Retire Your Turf* campaign.

Prepared the water conservation portions of the Integrated Regional Water Management Plan/Prop 50 Planning Grant Proposal, and Implementation Grant Proposal.

Presented water conservation information at a meeting of the National Association of the Remodeling Industry (NARI). Provided information on the expanded rebate program and the benefits of installing various water conserving technologies (dual-flush/High Efficiency Toilets, High Efficiency washing machines & dishwashers etc.).

Presented to a Monterey High School Civics Class. Provided information on the District's mission and functions, including the role of MPWMD. Emphasis was on the importance and potential of water conservation practices and technologies.

Exhibited conservation materials at the 2006 AMBAG Water Forum.

Arranged for a display of drought-tolerant plants and a landscaping slide show at the District's annual Open House.

District staff met with representatives of the Monterey County Hospitality Association (MCHA) to discussed conservation outreach to the hospitality industry.

2007

The District initiated development of the "Water-Wise Gardening in Monterey County" software. A highly successful collaboration initiated and funded by the Water Awareness Committee of Monterey County, and four of its members, i.e. MPWMD, CAW, Marina Coast Water District, and Cal Water Service (which serves the Salinas area). This interactive water conservation tool provides practical ideas

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and examples for creating water-saving gardens. It features examples of water-efficient landscaping and plants, this custom-tailored CD includes details descriptions for more than 1,000 plants and a "gardening guide" with a virtual encyclopedia of water-wise landscape design, irrigation and maintenance tips appropriate to our semi-arid, Mediterranean climate. Users optimize their experience by using "MY LIST," a feature that lets you "shop" for plants by creating a list of plants that can be printed to take to your local nursery. The Water-Wise Gardening in Monterey County CDs are available to the public.

Ordinance No. 127 expanded the rebate program to include rebates for High Efficiency Toilets and Zero Water Consumption Urinals.

Funded and participated in development and printing of conservation messages for towel, linen and restaurant signage with the Hospitality Association, CAW and AMBAG. The table tents, stickers and mirror decals assist the hospitality industry with achieving conservation program compliance.

Distributed water saving equipment at the Monterey County Fair and Del Rey Oaks Home Owners Association.

Partnered with California American Water Company (CAW) on a mailer detailing the water conservation and rebate programs.

The District with CAW finalized the joint CAW/MPWMD public outreach campaign, designed to inform and remind the community about requirements contained in Stage 1 of the District's Expanded Water Conservation and Standby Rationing Program.

Clarified provisions of the Expanded Water Conservation and Standby Rationing Plan.

Modified and expanded the rebate program and added its provisions to the MPWMD Rules and Regulations. This ordinance increased the refund amounts for water savings appliances \$100 to \$150 for High Efficiency Toilets, point of source on demand hot water, and 28 gallon washing machines; \$125 for ultra water saving dishwashers and \$200 for 18 gallon washing machines and instant access hot water systems. Water saved through this program is set aside to reduce community water use.

## **ONGOING:**

 Speaking and presenting in meetings, seminars and media interviews on the topics of water conservation practices & technologies and water permit requirements

- Enforcing conservation retrofit requirements and new construction requirements involving:
  - Mandatory retrofit of toilets and showerheads upon change of ownership or use, the addition of 25% or more of the existing floor area, or the addition of a bathroom.
  - Certification of compliance before every transfer of title and to verify water-saving retrofits in existing residential and non-residential uses
  - o Preliminary enforcement letters to property owners
  - Site inspections to verify compliance
  - o Further enforcement action, when necessary
- Distribution of free equipment, including:
  - Water-Wise Gardening in Monterey County CD-Rom (first copy free for property owners within MPWMD jurisdiction)
  - o Showerheads 1.75 gpm
  - Faucet aerators 1.0 gpm
  - Leak-detecting dye tablets
  - Moisture meters
  - o Automatic shut-off hose nozzles
  - o Rain gauges
  - A wide variety of water conservation literature and product brochures about the latest water efficient products for home and garden
  - Maintaining and revising water conservation information and resources in the Water Demand Division section of the District website
- Administering the MPWMD/CAW Rebate Program
  - o Voluntary replacement of inefficient toilets with ULF Toilets (1.6 gpf)
  - o High Efficiency Toilets (1.28 gpf average)
  - o Ultra-low consumption dishwasher 7.66 gallons maximum
  - o Ultra-low consumption washing machines 18-28 gallons
  - o Ultra-low consumption washing machines Under 18 gallons
  - Instant Access Hot Water systems and components
  - Smart Irrigation System Controllers
  - o Soil moisture sensors
  - o Rain sensors
  - o Zero water consumption urinals
  - Cistern systems \$25 for each 100 gallons of rainwater storage capacity, up to 3,000 gallons
- Taking an active role in the water demand management of the community's water resources by:
  - Assisting jurisdictions with planning and implementing water conservation measures and retrofits to obtain water credits, thereby assisting local jurisdictions with management of their water allocations

- Completing water demand evaluations and comments on development projects subject to the California Environmental Quality Act
- Reviewing, analyzing and commenting on the water demand impacts of all projects which could affect local water resources.
- Enforcing District Water Waste Rules by:
  - o Community education and outreach
  - o Site Inspections
  - Water Conservation Warning for first occurrence within 18 month period
  - Water Conservation Violation Notice and Notice of Fees Due for each subsequent, flagrant water waste occurrence within 18 months
  - o Direct CAW to install flow restrictors when appropriate
- Partnering with the Water Awareness Committee of Monterey County and other regional groups and agencies in a leadership and sponsorship role. WAC contributes by:
  - Featuring water conservation messages in local newspapers, television & radio announcements, mailed information and more
  - Hosting and sponsoring seminars and symposiums featuring the newest cutting-edge water conserving technology
  - o Planning, staffing and supplying water conservation exhibits and information booths at various public events
  - o Collaborating efforts and resources with regional agencies on major programs, projects and events